MicroVision’s Short-Throw Interactive Display Engine provides an integrated solution for projected display and interactivity in a single module. This complete solution of hardware, software and embedded machine learning delivers a unique interactivity experience with a large on-demand display with our best-in-class combination of brightness, resolution, size and power consumption.

MicroVision’s technology enables the next level of user interaction for IoT and AI Platforms. With our technology, customers can develop more natural user experiences by adding sight, touch and gesture to existing voice interactions, unlocking opportunities for increased monetization.

- Display and 3D sensing based interactivity in a single integrated module
- Enables compact product form factors with large, on-demand interactive display
- Multi-mode operation:
  - Display: Table top and wall modes
  - Interactivity: Virtual touch and mid-air gestures
- High definition, always-in-focus images
- Vivid, saturated laser colors. Intense contrast ratio creating borderless display
- Coincident sensing and display field of views, no calibration needed
- Low Power
**TABLE 1: SAMPLE IMAGE SIZES**

<table>
<thead>
<tr>
<th>PSE Distance from Projection Surface²</th>
<th>Width</th>
<th>Diagonal</th>
<th>Throw Ratio</th>
<th>Enhanced Brightness Luminance (nits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.4 inches</td>
<td>13.3</td>
<td>15.3</td>
<td>0.7</td>
<td>~400</td>
</tr>
<tr>
<td>10.4 inches</td>
<td>14.9</td>
<td>17.1</td>
<td>0.7</td>
<td>~320</td>
</tr>
<tr>
<td>11.4 inches</td>
<td>16.4</td>
<td>18.8</td>
<td>0.7</td>
<td>~260</td>
</tr>
</tbody>
</table>

1 Note: Specifications subject to change without notice  ² Additive to Display Power when Sensing function enabled  ³ Distance from projection surface to top of PSE

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**SPECIALS SPECIFICATIONS**

**DISPLAY PERFORMANCE**
- Display Technology: Laser Beam Scanning Technology
- Input Resolution: 1280x720
- Output Resolution: 1280x640
- Brightness: 65 lumens
- Enhanced Brightness: 80 lumens (typical video content)
- Color Depth: 24-bit true color, 16.7M colors
- Aspect Ratio: 16:9
- Throw Ratio: ~0.7 (See Table 1)
- Depth of Focus: 0.2m - Infinity
- Display Refresh Rate: 70Hz
- Sequential Contrast: >80,000:1
- Brightness Uniformity: >70%
- Color Gamut (vs. sRGB): >220%
- Start-up Time: <4 sec from power off, <0.1 sec from standby

**INTERACTIVITY PERFORMANCE**
- Interactivity Sensing Technology: Scanning LiDAR
- Sensing Field of View: Coincident with projection display
- Virtual Touch Operating Range: 6" - 12" Display height
- Multi-touch: 10 points

**SCANNING ENGINE (see fig. 1)**
- Optical Module Size: 35x34x62mm (See Fig. 2)
- Electronics Size: ~50x50 mm (See Fig. 2)
- Video Input Interface: MIPI-DSI Version 1.2
- Control Interface: UART (w/ MicroVision SDK)
- Interactivity Interface: USB2 HID (Android, Linux, Windows)

**STarter Kit**
The Starter Kit stand is sized to position the display engine at the default height of 9.4 inches to produce 15.3-inch diagonal interactive display as shown in Fig. 3 below.

**POWER**
- Single Supply Input Voltage: 12.0V
- Display Power @ 27% Video Image: ~7.5 W
- Display Power @ Full White Image: ~11.5 W
- Interactivity Sensing Power²: <1.5W

**LIGHT SOURCE**
- Laser Diodes: Red: ~638nm
- Green: ~520nm
- Blue: ~450nm
- IR: ~830nm

**MODEL NUMBERS**
- Scanning Engine: PSE-0407sti-421
- Starter Kit: MV-2407sti-421

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